**Amendments to the Claims**

The listing of claims below is intended to replace all prior listings of the claims in the present application.

1. (previously amended): An isolated nucleic acid molecule encoding a short integuments1 protein, wherein the nucleic acid molecule either: 1) has a nucleotide sequence of SEQ ID NO: 1 or 2) encodes a protein having an amino acid sequence of SEQ ID NO: 2.

2. (previously amended): An isolated nucleic acid molecule according to claim 1, wherein the nucleic acid molecule encodes a protein having an amino acid sequence of SEQ ID NO: 2.

3. (currently amended): An isolated nucleic acid molecule according to claim 1, wherein the nucleic acid molecule has a nucleotide sequence of SEQ ID NO: 1.

4. (previously amended): An antisense nucleic acid molecule encoding a nucleic acid sequence which is complementary to the nucleic acid molecule according to claim 1.

Claims 5-6 (canceled)

5 7. (previously amended): An expression vector comprising a transcriptional and translational regulatory DNA operably linked to the nucleic acid molecule according to claim 1.

Ue 8. (previously amended): An expression vector according to claim 5 7, wherein the nucleic acid molecule is in proper sense orientation and correct reading frame.

7 9 (currently amended): A host cell transformed ~~transduced~~ with the nucleic acid molecule according to claim 1.

8 ~~10.~~ 7 (original): A host cell according to claim ~~9~~, wherein the cell is selected from a group consisting of a bacterial cell, a virus, a yeast cell, and a plant cell.

Claim 11 (canceled)

9. ~~12.~~ (currently amended): A transgenic plant transformed ~~transduced~~ with the nucleic acid molecule according to claim 1.

Claim 13 (canceled)

10 ~~14.~~ (currently amended): A transgenic plant seed transformed ~~transduced~~ with the nucleic acid molecule according to claim 1.

Claim 15 (canceled)

Claims 16-17 (withdrawn)

11 ~~18.~~ (currently amended): A method of ~~regulating~~ increasing flowering in a plants comprising:

transforming ~~transducing~~ the ~~a~~ plant with the nucleic acid molecule according to claim 1 under conditions effective to ~~regulate~~ increase flowering in the plant.

Claim 19 (canceled)

12 ~~20.~~ (currently amended): A method of increasing fertility in a plants comprising:

transforming ~~transduced~~ the ~~a~~ plant with the nucleic acid molecule according to claim 1 under conditions effective to increase fertility in the plant.

Claim 21 (canceled)

13 ~~22.~~ (currently amended): A method of increasing fecundity of a plants comprising:

transforming ~~transduced~~ the ~~a~~ plant with the nucleic acid molecule according to claim 1 under conditions effective to increase fecundity of the plant.

Claim 23 (canceled)

14. ~~24.~~ (currently amended): A method of decreasing fertility in a plants comprising:

transforming ~~transducing~~ ~~a~~ the plant with a ~~the~~ nucleic acid molecule ~~according to claim 1 mutated to cause disruption of the nucleic acid molecule the nucleic acid molecule~~ that either: 1) has a nucleotide sequence of SEQ ID NO: 1 or 2) encodes a protein having an amino acid sequence of SEQ ID NO: 2, wherein the nucleic acid molecule has a nucleotide mutation characterized by either a) a single C to T transition ~~in exon 3 reading frame~~ resulting in an amino acid change of 415-proline to serine or b) a single T to A transversion ~~in exon 4 reading frame~~ resulting in an amino acid change of 431-isoleucine to lysine under conditions effective to decrease fertility in the plant.

Claim 25 (canceled)